

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

Claims 1–23. (Canceled):

Claim 24. (Previously presented): A method of controlling a heating apparatus comprising:

forming a photosensitive resin film on a substrate;  
exposing a to-be-exposed region of the resin film with a light of irradiation amount  $D$  to form an exposed region on the resin film;  
heating the resin film by a heat source of a heating apparatus;  
measuring a thickness of the resin film at the exposed region and a thickness of the resin film at a non-exposed region which is adjacent to the exposed region;  
calculating a difference  $\Delta T_r$  in thickness of the resin film between the exposed region and the non-exposed region; and  
controlling a temperature of the heat source of the heating apparatus on the basis of the difference  $\Delta T_r$  calculated and a before-hand obtained interrelation between the difference  $\Delta T_r$  and the temperature of the heat source.

Claim 25. (Currently Amended): A method of controlling a heating apparatus according to claim [[1]] 24, wherein a plurality of the exposed regions are formed on the resin film.

Claim 26. (Currently Amended): A method of controlling a heating apparatus according to claim 24, wherein the exposed region is positioned substantially just above the heat source of the heating apparatus.

Claim 27. (Currently Amended): A method of controlling a heating apparatus according to claim 24, wherein the irradiation amount  $D$  is an irradiation amount where a change amount  $\partial \Delta T_r / \partial T$  of the difference  $\Delta T_r$  with regard to the temperature is maximum or locally maximum.